

## CAST By-Laws

### ARTICLE I – NAME AND OBJECTIVES

Section 1. The name of this organization shall be the Computing and Systems Technology Division of the American Institute of Chemical Engineers.

Section 2. This Division is formed in the broad field of the chemical engineering application of systems and computing principles to problems including, but not limited to, analysis, management, design, operation and control of processes and systems.

Section 3. The objectives of the Division shall be:

- (a) To further the application of mathematical and computing principles in all aspects of chemical engineering, especially the analysis, design, operation and control of process and management systems.
- (b) To recommend to the Council of the AIChE positions or policies related to such applications.
- (c) To provide suitable programs to inform Institute members about topics of current interest in these fields.
- (d) To provide a communication medium for chemical engineers and other individuals to exchange non-confidential information concerning all facets of mathematics, management science, computers, control and systems activity through meetings, seminars, courses and publications.
- (e) To coordinate the Institute's activities with other societies and professional organizations active in this field.
- (f) To act as a source of information for chemical engineers who are not actively engaged in the mathematics, management, computer control systems fields, and to bring to their attention the importance of these activities, the need for consideration of their use in the general practice of chemical engineering and opportunities for their use in research, development, design and operation of process management systems.
- (g) To encourage chemical engineering educators to place suitable emphasis on these subjects and to encourage excellence in such teaching practices.

### ARTICLE II – OBLIGATIONS TO THE INSTITUTE

Section 1. The Division is under the supervision and control of the Chemical Technology Operating Council of the Institute.

Section 2. All divisional committees shall work in cooperation with corresponding National committees. Division programming activity shall be carried out in cooperation with the National Program Committee of the Institute.

Section 3. The Division shall not have the authority to act for, or in the name of, the Institute except with the explicit prior authorization of Board of Directors of the Institute. The Division does not have the authority to incur any financial obligations in the name of the Institute.

### ARTICLE III – MEMBERSHIP

Section 1. Membership in the Division shall consist of those who:

- (a) are members of the Institute, in any grade of membership, and
- (b) have paid the annual dues levied by the Division (see Article VII Section 1.)

There shall, however, be a grace period of one year during which a person may be a member of the Division while their application for membership in the Institute is being processed. Continuation as a member of the Division shall be contingent on subsequent acceptance by the Institute.

### ARTICLE IV – ORGANIZATION

Section 1. The activities of the Division shall be directed by an Executive Committee. This committee, headed by the Division Chair, shall consist of the four officers (Article IV, Section 2), the immediate past chair of the Division, six Division members selected as Directors by the members of the Division, and the following ex-officio members: The Chair of the Division Programming Board (Article IV, Section 9), the Chair of the Division Publications Board, the AIChE Staff Liaison, and AIChE Chemical Technology Operating Council's liaison member with the Division. All ex-officio members are to have full voting privileges.

Section 2. The officers of the Division shall be a Chair, a First Vice Chair, a Second Vice Chair, and a Secretary-Treasurer, all of whom shall hold membership in the Division and shall be Fellows, Members or Associate Members of the Institute. The term of office in each case shall be one year, with the exception of the Secretary-Treasurer, whose term shall be two years. Nominations for the offices shall come from the Nominating Committee (Article VI, Section 3). The Chair of the Division shall not be eligible for re-election to a Divisional office for a period of five years. The First Vice Chair is normally the sole nominee for the office of Chair. The Second Vice Chair is normally the sole nominee for the office of First Vice Chair. Any member may be nominated as the Second Vice Chair. The Secretary-Treasurer may be re-elected.

Section 3. Members of the Executive Committee (other than officers) shall consist of two groups: (a) elected and (b) ex-officio. The elected Directors shall serve a term of three years with two Directors being elected annually. They shall not be eligible for re-elected for a second term for a period of five years. The ex-officio members (Article VI,

Section 1) shall have no statutory limit on their term of service on the Executive Committee.

Section 4. The Chair or, in the case of absence, the First Vice Chair, the Second Vice Chair, or the Secretary-Treasurer successively shall preside at all meetings of the Division and its Executive Committee.

Section 5. The First Vice Chair shall perform the duties of the Chair in the latter's absence or inability to serve. In the event of a vacancy in the office of Chair, the First Vice Chair shall serve as the Chair with the Second Vice Chair assuming the First Vice Chair's vacated position until the next annual election; at this time two persons shall be nominated for the offices by the Nominating Committee and shall then, if elected, serve one year in that office in addition to the time served to fill the vacancy. If a vacancy occurs in the office of the Second Vice Chair, the Executive Committee shall appoint one of the Elected Directors to fill the vacancy until the next election. The person appointed shall not be the sole nominee for the office of First Vice Chair. The Nominating Committee shall present more than one nominee, in this case, for both First Vice Chair and Second Vice Chair. If a vacancy occurs in the office of Secretary-Treasurer prior to 1 August of the first year of a Secretary-Treasurer's two-year term, the Executive Committee shall appoint a replacement to serve until 31 December of that year. The Nominating Committee shall include two or more nominees for Secretary-Treasurer on the slate for that year's election. Should the vacancy occur on or after 1 August of the first year of the elected Secretary-Treasurer's term, the Executive Committee shall appoint a replacement to serve for the remainder of the two-year term. If a vacancy occurs in one of the Director's positions, the Executive Committee may appoint any Division member (who fulfills the requirements) to serve.

Section 6. The Secretary-Treasurer shall:

- (a) Keep the records of the proceedings of the Division. Handle the general correspondence of the Division and shall, at the direction of the Chair, issue notices of all meetings.
- (b) Handle and record the collection and disbursement of funds as authorized by the Executive Committee of the Division.
- (c) Prepare a proposed budget for the upcoming year.
- (d) Arrange for the preparation, tabulation and reporting of results in connection with elections.
- (e) Submit, at the end of each year, a financial report to the Executive Committee of the Division and to the Secretary of the Institute.

Section 7. There shall be Areas of the Division designated by the names inserted at the end of this section of these Bylaws. Each of these Areas shall be responsible for carrying out the plans and programs of the Division in their respective fields, subject to the direction of the Executive Committee of the Division. The names of the currently active Areas of the Division are:

- (a) Systems and Process Design;
- (b) Systems and Process Control;
- (c) Systems and Process Operations;
- (d) Applied Mathematics and Numerical Analysis;
- (e) Information Management and Intelligent Systems.

Section 8. New Areas may be added to the Division by a two-thirds vote of the Executive Committee subject to approval of AIChE Chemical Technology Operating Council. A minimum of 25 Division members may submit a written petition to the Executive Committee to propose the formation of a new Area.

Section 9. There shall be a Programming Board headed by a Chair appointed by the Executive Committee for a two-year term; this Chair may be re-appointed at two-year intervals at the discretion of the Executive Committee. The Board shall consist of the appointed Chair, an appointed Vice Chair who shall serve as Deputy Head in the absence of the Chair, and such other members as may be appointed by the Board Chair to carry out the duties of the Board. This Board will draw up long range plans and policies for the programming activities of the Division in coordination with the National Program Committee of the Institute. The Chair of this Board shall be the official representative of the Division to the National Program Committee.

Section 10. There shall be a Publications Board headed by a Chair appointed by the Executive Committee for a two-year term; this Chair may be re-appointed at two-year intervals at the discretion of the Executive Committee. The Board shall consist of the appointed Chair, the Associate Editor, the Division's Secretary-Treasurer, and such other members as may be appointed by the Board Chair. The Board will edit and publish a Division Newsletter. The Newsletter will be made available to all Division members at least three weeks prior to each National and Annual meeting. Publications policies for the Newsletter must be approved by the Executive Committee but all details of format and content will be determined by the Board.

Section 11. Such other committees as may be required shall be appointed by the Chair with the approval of the Executive Committee. Normally the Chair of each committee shall serve for two years, but the service of any committee of committee member may be terminated at any time by the Chair of the Division with the approval of the Executive Committee. Committees formed to carry out a specific task will be automatically disbanded upon acceptance of their final report to the Division Executive Committee. Nominating Committees are described in Article VI.

## ARTICLE V – MEETINGS

Section 1. There shall be at least one meeting of the Division each year held in conjunction with a National or Annual Meeting of the Institute. The time and place of the meeting shall be determined by the Executive Committee in consultation with the

Assistant Secretary of the Institute for Meetings and the General Arrangement Chair for that meeting.

Section 2. The Secretary-Treasurer shall notify Division members of all Divisional Meetings at least three weeks in advance of each meeting.

Section 3. A quorum for meetings of the Division shall consist of one percent (1%) of the membership or a quorum of the Executive Committee. Except where otherwise stated in the Bylaws, all actions at a meeting of the Division shall be decided by a majority vote.

Section 4. The presiding officer shall be the Division Chair or the next ranking officer (Article IV, Section 4) who shall decide the order of business, which is to include the reading of the minutes of the previous meeting, a financial report and reports of committees.

Section 5. The Executive Committee shall meet at least once but preferably more often each calendar year. Meetings shall generally be held in conjunction with the Institute's National or Annual meetings, but may be called by the Chair at such time and place as the Chair sees fit. Meetings may be held by physical attendance, teleconference, videoconference, or other electronic communication means. Votes may be cast either in person, by mail, or by other electronic communication means. Meetings shall also be called on the written request of four members of the Executive Committee. The Secretary-Treasurer shall notify the Executive Committee at least three weeks in advance of a meeting.

Section 6. A majority of the elected members of the Executive Committee, including officers and directors, shall constitute a quorum for a meeting of the Executive Committee. The meeting will be chaired by the highest ranking officer (Article IV, Section 4), whose vote shall decide the issue in case of a tie.

Section 7. Any member of the Executive Committee who misses three consecutive Executive Committee meetings shall be considered to have automatically tendered their resignation to the Executive Committee which may accept it or reject it by secret ballot at the next meeting after discussion of possible extenuating circumstances. To be considered present for any Executive Committee meeting, a member must have been in attendance for at least fifty percent (50%) of the meeting and to have presented such reports for which this member was responsible.

## ARTICLE VI – ELECTIONS

Section 1. The Chair, First Vice Chair, Second Vice Chair, and two Directors shall be elected annually by ballot made available to the members of the Division on or about October 1. The Secretary-Treasurer shall be elected on the same ballot during the annual elections occurring near the end of the incumbent's term or as specified in Article IV, Section 5. Votes may be cast either in person, by mail, or by other electronic

communication means. Election shall be by a majority of those voting. Ballots shall include notice of the date by which they must be received or cast in order to be counted, and that date shall be no earlier than four weeks after the ballots are made available. Ballots received or cast after this date shall not be counted. The count shall be certified to the Executive Committee.

Section 2. Delinquent members shall not be eligible to vote or to hold office (Article VII, Section 1).

Section 3. A Nominating Committee shall be formed in April of each year with the immediate Division Past Chair as its Chair, who may select two additional Division Members who are not currently serving in an elected capacity to serve as the committee. This committee shall formulate a slate of candidates for presentation to the members; this slate shall include one candidate each, for the offices of Chair and First Vice Chair, who shall normally be the past year's First Vice Chair and Second Vice Chair, respectively, and two or more candidates for Second Vice Chair, two Directors and for Secretary-Treasurer if on the ballot that year. If the past year's First Vice Chair and/or Second Vice Chair cannot stand for such uncontested election, then two or more candidates for the successive offices thus left vacant will be named. Nominations may also be made for any office (on the ballot) by petition of the membership if at least twenty Division members in good standing sign a petition and submit it to the Secretary-Treasurer by September 1.

Section 4. No member shall be eligible for election to more than one office at one time.

Section 5. The newly elected officers shall take office on January first of each year.

## ARTICLE VII – DUES AND FINANCES

Section 1. Annual dues shall be determined by the Executive Committee. They shall be payable in advance by January 1 to the Institute. Those members who continue to be delinquent on the following July 1 shall be dropped from the rolls of the Division.

Section 2. The dues shall be changed in amount only by the affirmative vote of two-thirds of the total members of the Executive Committee. This vote may be taken at a regular meeting or by mail.

Section 3. The Executive Committee shall make all other regulations regarding payment dues and shall provide for an annual audit of the Division's financial account.

Section 4. The Executive Committee shall review in their last meeting of the year the budget submitted for the upcoming year by the Secretary-Treasurer. This budget shall be subject to revision at the first meeting after the new officers take office. The officers of the Division may make expenditures within the provisions of the approved budget. On depletion of an individual fund in the approved budget, additional amounts shall be spent only after specific approval by the Executive Committee.

Section 5. The officers of the Division and the ex-officio members of the Executive Committee shall each have available a drawable fund in an amount to be established by the Division Directors but not to exceed one hundred dollars (\$100.00) per year to defray out-of-pocket communication expenses which they incur and which cannot be reimbursed by their employers. These funds will be administered by the Secretary-Treasurer in keeping with the annual audit. The Secretary-Treasurer is authorized to make payment against these drawable funds upon presentation of invoices for out-of-pocket communication expenses. Such items which are reimbursable will be defined by the Directors. On depletion of an individual fund, an additional sum may be made available at the request of the particular officer and on the specific approval of the Directors at the first meeting succeeding or coincident with notification by the Secretary-Treasurer that an officer's fund has been depleted.

## ARTICLE VIII – GENERAL PROVISIONS

Section 1. The decision of the Executive Committee shall be final on any question concerning the interpretation of the Bylaws, subject to the jurisdiction of the Chemical Technology Operating Council of the Institute.

Section 2. In all respects not specifically covered by these Bylaws, the general rules of the Institute governing the conduct of Divisions shall apply with equal force as if included in these Bylaws.

Section 3. The Secretary-Treasurer of the Division shall serve as Parliamentarian and shall rule on point of order and give information as requested by the presiding officer.

## ARTICLE IX – AWARDS

Section 1. The CAST Division Awards Program consists of the Computing in Chemical Engineering Award, the Computing Practice Award, the W. David Smith, Jr. Graduate Publication Award, the CAST Directors' Awards, the CAST Outstanding Young Researcher Award, the David Himmelblau Award for Innovations in Computer-Based Chemical Engineering Education, and the CAST Division Distinguished Service Award. A person may be nominated for only one award in a given year.

Section 2. The Awards Program is administered in accordance with the following Sections of this Article by the Second Vice Chair of the Division who will have the following responsibilities:

- (a) Appointment and chairing of the Awards Committee provided in Sections 3 and 4.
- (b) Appointment of an Advisory Committee provided in Section 5.
- (c) Solicitation and management of funds to support the Awards Program.
- (d) Preparation of the Awards and presentation to the selected recipients.

Section 3. The Computing in Chemical Engineering Award will be governed by the following conditions:

- (a) This Award will be given to an individual to recognize outstanding contributions to chemical engineering computing and systems technology.
- (b) The Award consists of \$3,000 and a plaque.
- (c) The Award will be made annually if a suitable recipient is found. The recipient need not be a member of AIChE. A recipient may receive this Award only once.
- (d) The recipient will be selected by the Awards Committee. The Awards Committee will be chaired by the CAST Division Second Vice Chair. The Committee will normally consist of the five CAST officers (Past Chair, Chair, First and Second Vice Chairs, and Secretary/Treasurer); the six CAST Directors; and the three most recent recipients of the Computing in Chemical Engineering Award. The Awards Committee should reflect a reasonable balance among the interests of the different Programming Areas of the Division.
- (e) Nominations for the Award may be made by any member of AIChE, including the Awards Committee, or by another interested party. Nominations should be made on a current AIChE Award Nomination Form and submitted to the CAST Division Second Vice Chair. The deadline for submission of nominations will be April 1 or as otherwise established by the CAST Division Second Vice Chair and published on the AIChE and CAST Division web sites. A nomination will remain active for 3 years.

Section 4. The Computing Practice Award will be governed by the following conditions:

- (a) This Award will be given to an individual for an outstanding contribution to the practice or application of chemical engineering computing and systems technology.
- (b) The Award consists of \$3,000 and a plaque.
- (c) Nomination and selection procedures of Sections 3c, 3d and 3e above will also apply to the Computing Practice Award.

Section 5. The W. David Smith, Jr. Graduate Publication Award will be governed by the following conditions:

- (a) This Award will be given to an individual for outstanding published work in chemical engineering computing and systems technology. The publication shall consist of a single paper based on work done by the individual while pursuing graduate or undergraduate studies.
- (b) The Award consists of \$1,500 and a plaque.
- (c) Selection procedures of Sections 3c and 3d above will also apply to the W. David Smith, Jr. Graduate Publication Award.



- (d) Nominations for the Award may be made by any faculty member of a university. Nomination should be made on a current AIChE Award Nomination Form and submitted to the CAST Division Second Vice Chair. The deadline for submission of nominations will be April 1 or as otherwise established by the CAST Division Second Vice Chair and published on the AIChE and CAST Division web sites. Each applicant is eligible for consideration only for a three year period that begins with the initial nomination. Additionally, on January 1 of the year of nomination, no more than 5 years would have elapsed since the publication of the paper used as the basis for the nomination.

Section 6. The CAST Outstanding Young Researcher Award will be governed by the following conditions:

- (a) This Award will be given to an individual under the age of 40 to recognize outstanding contributions to the chemical engineering computing and systems technology literature. The individual must be age 39 or less on December 31 of the award year. An individual age 40 or over will be eligible for this award if, on December 31 of the award year, 12 years or less have elapsed since this individual received the Ph. D. degree.
- (b) The Award consists of \$3,000 and a plaque.
- (c) Nomination and selection procedures of Sections 3c, 3d and 3e above will also apply to the CAST Outstanding Young Researcher Award.

Section 7. The David Himmelblau Award for Innovations in Computer-Based Chemical Engineering Education will be governed by the following conditions:

- (a) This Award will be given to an individual or group making new and novel contributions to the use of computers in chemical engineering education.
- (b) The Award consists of \$1,000 and a plaque.
- (c) Nomination and selection procedures of Sections 3c, 3d and 3e above will also apply to the David Himmelblau Award.

Section 8. The CAST Directors' Award will be governed by the following conditions:

- (a) This Award will be given to an individual or individuals for the best poster presentation in the CAST sessions at the AIChE Annual Meeting.
- (b) The Award consists of \$500 and a plaque.
- (c) The Award will be made annually if suitable recipients are found. The recipient(s) need not be a member of AIChE.
- (d) The recipient will be selected by majority vote of the Directors' Award Committee, as appointed by the Executive Committee, within one week of the meeting. In the case of a tie, multiple Awards will be made with the Award divided equally according to the number of Awards.

Section 9. The CAST Directors' Student Presentation Award will be governed by the following conditions:

- (a) This Award will be given to a student or students for the best oral presentation in the CAST sessions at the AIChE Annual Meeting.
- (b) The Award will consist of a plaque
- (c) The Award will be made annually if suitable recipients are found.
- (d) The recipient will be selected by majority vote of the Award Committee, as appointed by the Executive Committee, within one week of the meeting. In the case of a tie, multiple Awards will be made with the Award divided equally according to the number of Awards.

Section 10. The CAST Division Distinguished Service Award will be governed by the following conditions:

- (a) This Award will be given to an individual for outstanding service to the Computing and Systems Technology (CAST) Division.
- (b) The Award consists of a plaque.
- (c) Nomination and selection procedures of Sections 3c, 3d and 3e above will also apply to the CAST Division Distinguished Service Award.

## ARTICLE X – AMENDMENTS

Section 1. All proposed amendments of these Bylaws shall be reduced to writing. Amendments shall be proposed by (a) the Executive Committee, (b) majority vote of the members at a Divisional meeting, or (c) petition of ten percent (10%) of the members of the Division to the Executive Committee.

Section 2. A proposed amendment and ballot shall be sent to all Division members by first-class mail or electronic communication means. The ballot shall include notice of the date by which it must be cast and that date shall be no earlier than four weeks after issuance of the ballots. Ballots cast after the specified date shall not be counted. The results shall be certified to the Executive Committee, which shall accept as approval of the amendment, a two-thirds affirmative vote of those casting these ballots. The amendments shall then be submitted to the Chemical Engineering Technology Operating Council of the Institute and shall become an effective part of the Bylaws upon its approval.

Section 3. The names of Areas of the Division may be added or deleted in the list in Article IV, Section 7, by vote of the Executive Committee. Such action does not constitute an amendment to these Bylaws.

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